



09876171.062000

#10/B

Attorney Docket No.: A-66914-2/AMS

PATENT

TECH CENTER 1600/2900

OCT 04 2001

RECEIVED

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Zarling, et al.

Examiner: B. Loeb

Group Art Unit: 1636

Serial No. 09/886,171  
(CON of 09/373,347)

Filed: June 20, 2001

For: Domain Specific Gene  
Evolution

## CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231.

Date: September 20, 2001

Signed: Maria Ciganovich

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please delete the paragraph on page 1 beginning at line 4 and replace it with the following rewritten paragraph:

B1 This application is a continuation of U.S. Application No. 09/373,347, filed August 12, 1999, <sup>now abandoned,</sup> which is a continuation-in-part of U.S. Application No. 09/133,934, filed August 14, 1998, now U.S. Patent No. 6,074,853, and which claims the benefit of U.S. Provisional Application No. 60/096,330, filed August 12, 1998.

Please delete the paragraph on page 37 beginning at line 11 and replace it with the following rewritten paragraph:

B2 To evolve the scFV to higher affinities, probes are synthesized to target CDRs in the light and heavy chains. Each probe has sequences that are dengerate for corresponding CDRs, but homologous to the frame-work regions for homology clamping (Figure 5). The probes are combined with RecA to form nucleoprotein filament as described in Example 1. The filament are hybridized to purified scFv phagemid DNA to produce a hybrid complex. Complexes are transformed into recombination proficient *E. coli* strain (e.g. BB4) to allow strand exchange. The bacteria are also transformed with helper phage to assemble and package the scFv phagement containing mutagenized or evolved CDR regions.